

FIRE TECHNOLOGY (503)

Information provided includes course descriptions by subject only. For complete 2024-2025 programs/academic plans, please refer to Academic Programs (<http://catalog.blackhawk.edu/academics/>).

503-101 Firefighter Health and Fitness I

Credits: 1

Overview of fitness as it pertains to prospective firefighters. Includes endurance training, flexibility training, and strength conditioning. An overview of the nutritional values as it to prospective firefighters. An overview of mental and emotional well being of prospective firefighters.

Aid Code: 10 - undefined.

Complete Course Listing

503-102 Firefighter Health and Fitness II

Credits: 1

Overview of fitness as it pertains to prospective firefighters. Includes endurance training, flexibility training, and strength conditioning. An overview of the nutritional values as it to prospective firefighters. An overview of mental and emotional well-being of prospective firefighters.

Aid Code: 10 - undefined.

Complete Course Listing

503-103 Firefighter Health and Fitness III

Credits: 1

Overview of fitness as it pertains to prospective firefighters. Includes endurance training, flexibility training, and strength conditioning. An overview of the nutritional values as it to prospective firefighters. An overview of mental and emotional well-being of prospective firefighters.

Aid Code: 10 - undefined.

Complete Course Listing

503-104 Firefighter Health and Fitness IV

Credits: 1

Overview of fitness as it pertains to prospective firefighters. Includes endurance training, flexibility training, and strength conditioning. An overview of the nutritional values as it to prospective firefighters. An overview of mental and emotional well-being of prospective firefighters.

Aid Code: 10 - undefined.

Complete Course Listing

503-109 Intro to Hazardous Materials

Credits: 1-3

This course provides an introduction to the Hazardous materials problem by presenting the foundation needed to go further in the study of hazardous materials, such as "hands on" courses and incident-command courses. The chemistry presented in this course is designed to be the minimum a firefighter will need to understand and recognize in each hazard class. In general, each hazard class shows what a firefighter can expect in fire and non-fire situations.

Aid Code: 10 - undefined.

Complete Course Listing

503-128 Emergency Medical Technician Applications

Credits: 1-3

This course is an extension of, and completion of, the EMT Fundamental course. This course covers the bulk of the Emergency Medical Technician-Basic certification course to include the handling of cervical and spine injuries, burn injuries, heart and breathing related problems, shock, and other trauma injuries. This course includes several lab days to practice and perfect skills, clinical time, and extensive hands-on activities. This course prepares students for national certification testing for EMT-Basic. Admittance into this course must be within 2 years of completing Course # 503-125, EMT Fundamentals.

Aid Code: 10 - undefined.

Pre-requisites: (503-125)

Complete Course Listing

503-139 Principles of Emergency Svcs

Credits: 1-3

Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; and fire service nomenclature.

Aid Code: 10 - undefined.

Complete Course Listing

503-142 Fire Fighting Principles

Credits: 1-4

Describes basic fire behavior, techniques used to control structural and related fire emergencies, and life safety practices. Students perform all practical evolutions necessary to control and extinguish fires and otherwise meet all requirements for Firefighter I certification with the State of Wisconsin.

Aid Code: 10 - undefined.

Co-requisites: (503-153)

Complete Course Listing

503-143 Building Construction for Fire Protection

Credits: 1-3

Provides the components of building construction that relate to fire and life safety.

Aid Code: 10 - undefined.

Complete Course Listing

503-151 Fire Prevention

Credits: 1-4

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, and identification and correction of fire hazards.

Meets all requirements for Fire Inspector I certification with the State of Wisconsin.

Aid Code: 10 - undefined.

Pre-requisites: (503-142) and (503-153) and (503-159) or (Need Dean Approval/Chair Apprv)

Complete Course Listing

503-153 Hazardous Materials Awareness & Operations

Credits: 0.05-1

In this course, students will learn characteristics relating to hazardous materials including problems of recognition and defensive operations. The course is designed to prepare students for the Hazardous Materials Awareness and Operations level of NFPA 472.

Aid Code: 10 - undefined.

Co-requisites: (503-142)

Complete Course Listing

503-154 Hazardous Materials Chemistry

Credits: 1-2

This course provides basic chemistry relating to the categories of hazardous materials including recognition, identification, reactivity, and health hazards encountered by emergency services.

Aid Code: 10 - undefined.

Pre-requisites: (503-153) and (503-195)

Complete Course Listing

503-156 Strategies, Tactics & Inc Mgmt

Credits: 1-4

Provides an in-depth analysis of the principles of emergency response through utilization of an incident management system. Prepares students to pursue current national ICS training requirements.

Aid Code: 10 - undefined.

Pre-requisites: 503-142

Complete Course Listing

503-157 Fire Investigation

Credits: 1-3

Provides learners with the fundamentals and technical knowledge needed for proper fire scene investigations.

Aid Code: 10 - undefined.

Pre-requisites: (503-142) and (503-153) and (503-159) or (Need Dean Approval/Chair Apprv)

Complete Course Listing

503-159 Fire Fighting Principles II

Credits: 1-2

Builds on the basic skills learned in Fire Fighting Principles with an emphasis on scene management, communication, and fire operations processes.

Aid Code: 10 - undefined.

Pre-requisites: (503-142) and (503-153) or (Need Dean Approval/Chair Apprv)

Complete Course Listing

503-160 Fire Protection Technician Internship

Credits: 1-3

The Fire Protection Technician Internship is designed for students who meet the required prerequisites in order to serve at district fire departments as a responder. This opportunity affords each intern with the learning and understanding of the day-to-day worklife and culture of fire service. Included in the student intern's responsibilities will be station duties of cleaning, maintenance of fire equipment and apparatus, response to EMS and fire emergencies and fire inspections under the supervision of a designated Fire Department supervisor. FPT interns may also be involved in public relations and fire prevention, responsibilities of a subordinate, chain of command, organizational requirements, and the formal and informal relationships, work climate, and complexities of fire service culture. The total time on the job as an intern is 216 hours and is designed to be served in the assigned fire station, under supervision. The shift schedule will be determined by the Fire Coordinator, student, and hosting fire department based on program outcomes and student needs but must be completed in one semester. Completion requires satisfactory reporting from assigned agency fire chief, Fire Coordinator, and a passing grade on the final portfolio submitted by the student for the internship.

Aid Code: 10 - undefined.

Pre-requisites: (503-142) and (503-153) and (503-128 or 531-110)

Complete Course Listing

503-191 Principles of Emergency Services

Credits: 1-2

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

Aid Code: 10 - undefined.

Complete Course Listing

503-192 Principles of Emergency Services Safety & Survival**Credits:** 1-3

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

Aid Code: 10 - undefined.**Pre-requisites:** (503-142) and (503-153)

Complete Course Listing

503-193 Fire Protection Systems**Credits:** 1-3

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

Aid Code: 10 - undefined.**Pre-requisites:** (503-143) and (503-159)

Complete Course Listing

503-194 Fire Protection Hydraulics**Credits:** 1-3

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems.

Aid Code: 10 - undefined.**Pre-requisites:** 503-142

Complete Course Listing

503-195 Fire Behavior and Combustion**Credits:** 1-3

This 3 credit course provides an in-depth look at the combustion process and chemical reaction along with an analysis of fire behavior, principles, and theories. This course will also examine the physics of the combustion process, the products of combustion, and the effects of fire and combustion inside a structure, and the impact on the firefighter and victims who are involved in the fire environment. A key component to this course will be observations of fire and the products of combustion within scale models.

Aid Code: 10 - undefined.

Complete Course Listing

503-401 LP-Gas School**Credits:** 0.05-0.4**Aid Code:** 47 - undefined.

Complete Course Listing

503-404 Rural Water Supply**Credits:** 0.05-0.8**Aid Code:** 47 - undefined.

Complete Course Listing

503-407 Basic Pump Operation**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-408 Fire Incident Command**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-409 Fire Instructor I**Credits:** 0.1-4**Aid Code:** 47 - undefined.

Complete Course Listing

503-410 MCTO- Decision Making**Credits:** 0.1-1.2**Aid Code:** 47 - undefined.

Complete Course Listing

503-411 Fire Extinguisher Safety**Credits:** 0.1-0.2**Aid Code:** 47 - undefined.

Complete Course Listing

503-412 Incident Command**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-413 Forcible Entry**Credits:** 0.05-1.6

This 1:16 hour class is designed for the firefighter with any level of experience being that it is only a basic level course covering basic Forcible Entry techniques. In this class the student will learn basic skills concerning many types of: force entry, tools needed, types of tools used, how to use these tools and instructor tips and tricks during classroom and hands on tool exercises. Upon successful completion of this class, the student should walk away with an increased level of basic firefighter competencies on this important subject.

Aid Code: 47 - undefined.

Complete Course Listing

503-414 MCTO- Simulations**Credits:** 0.1-1.2**Aid Code:** 47 - undefined.

Complete Course Listing

503-415 Emergency Rescue/Fire/Crash
Credits: 0.2-6

Aid Code: 47 - undefined.

Complete Course Listing

503-416 Entry DR/OP Non-Cert-Part 1
Credits: 0.1-1.5

Aid Code: 47 - undefined.

Complete Course Listing

503-417 Entry DR/OP Non-Cert Part 2
Credits: 0.1-1.5

Aid Code: 47 - undefined.

Complete Course Listing

503-418 DR/OP Aerial Non-Cert Part 3
Credits: 0.1-0.6

Aid Code: 47 - undefined.

Complete Course Listing

503-420 MCTO-Prepartion
Credits: 0.1-1.2

Aid Code: 47 - undefined.

Complete Course Listing

503-421 Natl Fire Incident Report Sys
Credits: 0.05-0.8

Aid Code: 47 - undefined.

Complete Course Listing

503-422 Agriculture-Hazards & Rescue
Credits: 0.1-0.8

Aid Code: 47 - undefined.

Complete Course Listing

503-423 River Rescue
Credits: 0.2-2

Aid Code: 47 - undefined.

Complete Course Listing

503-424 Instrnl Technique-Fire Officer
Credits: 0.1-1.2

Aid Code: 47 - undefined.

Complete Course Listing

503-425 Arson Investigation
Credits: 0.1-2

Aid Code: 47 - undefined.

Complete Course Listing

503-426 MCTO- Tactics
Credits: 0.1-1.2

Aid Code: 47 - undefined.

Complete Course Listing

503-430 Emergency Veh Operations Crse
Credits: 0.05-1

Aid Code: 47 - undefined.

Complete Course Listing

503-434 Driver/Pump Oper-Part III
Credits: 0.05-2.1

Aid Code: 47 - undefined.

Complete Course Listing

503-439 Fire Behavior & Reading Smoke
Credits: 0.05-0.15

This class expands on the basic fire behavior materials learned during initial firefighting training. It focuses on the importance of deducing critical fire characteristics from the attributed of visible smoke. Students will learn how understanding smoke volume, velocity, density, and color can help predict hostile fire events, as well as tactics and strategies that are useful to prevent these events from occurring.

Aid Code: 47 - undefined.

Complete Course Listing

503-442 Technical Rescue
Credits: 0.1-1.6

Aid Code: 47 - undefined.

Complete Course Listing

503-443 Basic SCBA
Credits: 0.1-0.8

Aid Code: 47 - undefined.

Complete Course Listing

503-444 Adv Fire Fighting Techniques
Credits: 0.1-1.6

Aid Code: 47 - undefined.

Complete Course Listing

503-445 Incident Safety Officer**Credits:** 0.1-1.3

This 2-day course examines the Safety Officer's role at emergency responses. A specific focus on operations within an Incident Command System (ICS) as a Safety Officer is a main theme. Response to all-hazards types of situations will be emphasized.

Aid Code: 47 - undefined.

Complete Course Listing

503-446 Emergency Response-Terrorism**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-447 Leadership Developmnt-Fire Sci**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-448 Advanced SCBA Search & Rescue**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-450 Trench Operations & Technician**Credits:** 0.1-4**Aid Code:** 47 - undefined.

Complete Course Listing

503-451 Confined Space Rescue Operatio**Credits:** 0.05-2.4**Aid Code:** 47 - undefined.

Complete Course Listing

503-453 Fire Academy Skills Lab**Credits:** .4

This course identifies examples of confined spaces, discusses OSHA permit requirements, defines Confined Space Entry, explains roles of the confined space entrant, attendant, supervisor, and responsible person, discusses entrance options and requirements based on permit or non-permit and private contractor entry requirements, discusses and uses portable gas monitor equipment, identifies confined spaces in a specific workplace, and provides practice in filling out a confined space entry form.

Aid Code: 47 - undefined.

Complete Course Listing

503-454 Health and Safety Officer**Credits:** 0.5-1.8

This two-day course examines the Health and Safety Officer's role in identifying, evaluating and implementing policy and procedures that affect health and safety aspects for emergency responders. Risk analysis, wellness, and other occupational safety issues will be the main emphasis of this course.

Aid Code: 47 - undefined.

Complete Course Listing

503-455 House Burning Techniques**Credits:** 0.1-1.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-456 Industrial Fire Brigade Trng**Credits:** 0.1-1

Provides an in-depth analysis of the principles of emergency response through utilization of an incident management system. Prepares students to pursue current national ICS training requirements.

Aid Code: 47 - undefined.

Complete Course Listing

503-457 Airport Emergency Mgt**Credits:** 0.2-6.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-459 Rope Rescue Operations**Credits:** 0.1-4**Aid Code:** 47 - undefined.

Complete Course Listing

503-460 Driver Operator Aerial**Credits:** 1-3.6**Aid Code:** 47 - undefined.

Complete Course Listing

503-461 Rope Rescue Technician**Credits:** 0.1-4**Aid Code:** 47 - undefined.

Complete Course Listing

503-462 Haz Mat Technical Level

Credits: 0.1-4

This 40 hour class is intended for those who are seeking NFPA 472 Hazardous Material Technician level training as part of an emergency response team. Students must have documented training at the Hazardous Materials Operations level to enroll in this class. Concurrent enrollment in an Operations level class may be allowed with instructor permission.

Aid Code: 47 - undefined.

Complete Course Listing

503-463 Int. Tech to AEMT Transition

Credits: 0.1-4.2

Aid Code: 47 - undefined.

Complete Course Listing

503-465 Fire Fighter Skills Review

Credits: 0.05-0.8

This course will review basic and advanced fire fighters in a lab setting. Review of basic and advanced skills are integral part of a fire fighters ongoing training, and this course will give the student the ability to maintain and improve proficiency of their skills.

Aid Code: 47 - undefined.

Complete Course Listing

503-466 Fire Fighter Skills Review

Credits: 0.05-0.4

This course will review basic and advanced fire fighters in a lab setting. Review of basic and advanced skills are integral part of a fire fighters ongoing training, and this course will give the student the ability to maintain and improve proficiency of their skills.

Aid Code: 47 - undefined.

Complete Course Listing

503-711 EI FF I Part A

Credits: 0.05-3

Aid Code: 47 - undefined.

Complete Course Listing

503-712 EI FF I Part B

Credits: 0.05-3

Aid Code: 47 - undefined.

Pre-requisites: (503-400 or 503-711)

Complete Course Listing

503-721 Cert FFI Part C

Credits: 0.05-3.6

Aid Code: 47 - undefined.

Pre-requisites: (503-405 or 503-712)

Complete Course Listing

503-730 Cert FF II

Credits: 0.05-4.2

Aid Code: 47 - undefined.

Pre-requisites: (503-428 or 503-721)

Complete Course Listing

503-731 Live Fire Instructor

Credits: 0.05-0.6

This is a 24-hour course for Live Fire Instructor which upon completion the student can enter the certification process to receive their IFSAC certification in Live Fire Instructor. The course covers the NFPA 1041 chapter 7 for Live Fire Instructor. It consists of 8 hours of lecture and 16 hours of hands-on-training of managing students during live fire training in a burn facility.

Aid Code: 47 - undefined.

Complete Course Listing

503-744 Cert D/O Pump Part I

Credits: 0.05-3.3

Aid Code: 47 - undefined.

Pre-requisites: 503-721

Complete Course Listing

503-745 Cert D/O Pum Part II

Credits: 0.05-3.3

Aid Code: 47 - undefined.

Pre-requisites: 503-744

Complete Course Listing

503-747 Cert D/O Aerial

Credits: 0.05-3.6

Aid Code: 47 - undefined.

Pre-requisites: 503-745

Complete Course Listing

503-751 Cert Fire Inspect Pt I

Credits: 0.05-3

Aid Code: 47 - undefined.

Complete Course Listing

503-752 Cert Fire Inspect Pt II

Credits: 0.05-3

Aid Code: 47 - undefined.

Pre-requisites: 503-751

Complete Course Listing

503-763 Fire Officer 1**Credits:** 0.05-4**Aid Code:** 47 - undefined.**Pre-requisites:** 503-730

Complete Course Listing

503-764 Fire Officer 2**Credits:** 0.05-4**Aid Code:** 47 - undefined.**Pre-requisites:** 503-763

Complete Course Listing

503-780 Hazardous Materials Operations**Credits:** 0.05-2**Aid Code:** 47 - undefined.

Complete Course Listing

503-999F Fire Fighter Testing**Credits:** 0

Complete Course Listing